

REMARKS

The Final Office Action dated November 10, 2010 has been carefully considered. Claim 2 has been amended. Claim 2 is in this application. No new matter has been added.

The previously submitted claim was objected to as informal. Applicant has amended claim 2 in accordance with the Examiner's suggestions.

The previously submitted claim was rejected under 35 U.S.C. § 103 as obvious in view of U.S. Patent No. 2,672,138 to Carlock (Carlock '138) in combination with U.S. Patent No. 6,386,197 to Miller and U.S. Patent No. 2,569,743 to Carlock (Carlock '743). Applicant submits that the teachings of these references do not disclose or suggest the invention defined by the present claim.

The Examiner indicated that Carlock '138 fails to teach a peripheral rim as claimed and that Carlock '743 teaches that the nasal cylinders can be detachable from a support frame by using a the threaded peripheral rim (3) extending radially beyond an outer diameter of a lower part of the cylinders and that it would be obvious to have provided the threaded rim to the cylinders of Carlock '138.

Applicant submits that Carlock '138 is an improvement over Carlock '743, which has as main aim to make one piece flexible plastic device, much lighter in weight, easier to adjust and place in proper position, and give the device a more artistic and attractive design. In order to achieve these aims, Carlock '138 disclose technical features including; the bulge-lock (1) exterior of the breathing tubes which fits firmly but comfortably in the pocket or nest of the interior of the lobe of the nostril (col. 3, lines 24-28) and lyre-type wings (4/5) which lock around the exterior lobes of the nose, thus achieving that the breathing tubes must not slip out of the nostrils (col. 3, lines 35-42).

Carlock '743, disclose a device to promote nasal breathing and prevent snoring, which have as function to hold the nostril or nostrils of the user in an extended open position. (Col. 1, lines 1-4). More particularly, it is an aim of the Carlock '743 to provide a tube which is adapted to fit into each nostril which are provided with a relatively large bore to afford an ample air passage for inhaling and exhaling.

In contrast to the invention defined by the present claims, neither Carlock '138 nor

Carlock '743 teach or suggest a protruding support extending from a rim of lower part of a cylinder adapted to add pressure on the external part of the alar sidewall of the nose. In the present invention, improvements in the flow of air through the nose is made through the technique of muscle stimulation of the perinasal wings at the inferior part of the nose. Stimulation is a factor that acts on the sensory nerve fibers, creating a nerve impulse that may generate motor reactions. This type of stimulation improves the nasal functioning and correcting the nasal blockage.

To accomplish this stimulation, the nasal stimulator of the present invention acts by inserting as pair of cylinders in the nostrils, dilating (specification, page 1, lines 3 and 21) the opening space or dome of the nose and, stimulating the elevator muscle of the nasal alar, helping with these two actions to the centered of the nasal wall or septum, and remodeling the nasal cartilage. At the same time, the sum of these two actions above exposed, facilitates the breathing through the nose. Therefore, with this invention three technical effects can be achieved, which are: the dilating of the nose (open space or dome); the stimulation of the elevator muscle of the nasal alar; and the centered of the nasal wall or septum by remodeling of the nasal cartilage. The technical effects of the present invention improve the breathing for persons who suffer nasal blockage in whom the breathing is done mainly through the mouth.

Applicant submits that the dilating function of the nose is accomplished with the cylindrical shape of the nasal stimulator. The stimulation function, of the levator muscle of the alar nose is caused by a combination of, by one part, the touch or "grazing" that occurs between said widening (2) and the internal part of the nose, and by other part, by the pressure added by the protruding support (4) on the exterior sidewall of the nose. However, neither Carlock '138 or Carlock '743 teach or suggest a pair of cylinders. Rather, Carlock '138 and Carlock '743 disclose that the devices are substantially frustoconical shaped. Applicant submits that the technical feature of stimulation using a cylinder shaped nasal stimulator is not taught or suggested in either Carlock '138 or Carlock '743.

Applicant submits that the wings (4) to Carlock '138 and the protruding support of the present invention have different structure. As shown in the figure below, the actuation area of the nasal stimulator of the protruding support is at the inferior part of the nose at the external part

of the sidewall of the alar of the nose to provide the stimulation function in the perinasal muscle. In contrast, the wings (4) to Carlock '138 are much larger than the protruding support of the present invention and basically function to lock effectively around the exterior lobes of the nose.



The technical effect of the nasal stimulator of the present invention is shown in the figure below, which can be seen the effect on nasal morphology, achieving a variation in the position of the alar nose with the use of this stimulator. The arrows show the dilating and the elevating of the alar nose.



In addition, the peripheral rim of the present claims serves as a limit where the insertion of the stimulator into the nose should not pass, this rim to impede the cylinders from going in the nostrils further than advisable when they are inserted in the nose to dilate the noses' opening space or dome. This function is much different than the threaded peripheral rim (3) of Carlock '743. Carlock '743 teaches that the nasal cylinders can be detachable from a support frame by using a threaded peripheral rim (3) extending radially beyond an outer diameter of a lower part of the cylinders.

The Examiner indicated that Carlock fails to teach that each of the cylinders is internally perforated and that it would be obvious in view of Miller to have provided perforations in some portion of the interior of the Carlock cylinders in order to deliver medicament to a users lungs.

Miller discloses a nasal air passageway opening device including a body including protrusions to increase frictional resistance with the nasal passage. The body can be hollow and include a plurality of apertures for release of a medicament. In contrast to the invention defined by the present claims, Miller does not teach or suggest a pair of cylinders each including a widening that surrounds the central portion of the cylinders except in a portion of the cylinder which comes into contact with a nasal septum during use. In addition, Miller does not teach or suggest a peripheral rim on a lower part of the cylinder extends radially beyond an outer diameter of the lower part of the cylinder. Further, Miller does not teach or suggest a protruding support extending from the rim and adapted to add pressure on the external alar of the nose. Accordingly, Miller does not cure the deficiencies of Carlock noted above and the invention defined by the present claims is not obvious in view of Carlock in combination with Miller.

In view of the foregoing, Applicant submits that all pending claim is in condition for allowance and request that all claims be allowed. The Examiner is invited to contact the undersigned should he believe that this would expedite prosecution of this application. It is believed that no fee is required. The Commissioner is authorized to charge any deficiency or credit any overpayment to Deposit Account No. 13-2165.

Respectfully submitted,



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